



GREENBLUM & BERNSTEIN, P.L.C.
Intellectual Property Causes
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191

\$ AF *27W*

Attorney Docket No. P23935

In re application of: K. MAEHIRO

Application No. : 09/820,554

Mail Stop Appeal-Brief-Patents
 Group Art Unit : 2161

Filed : March 29, 2001

Examiner : S. Y. Chen

For : MEMBERSHIP INFORMATION RETRIEVAL SERVER, USER TERMINAL, MESSAGE-SENDING TERMINAL, AND METHOD FOR RETRIEVING MEMBERSHIP INFORMATION AND FOR SENDING MESSAGE

Mail Stop Appeal-Brief-Patents

Commissioner for Patents

U.S. Patent and Trademark Office

Customer Service Window, Mail Stop Amendment

Randolph Building

401 Dulany Street

Alexandria, VA 22314

Sir:

Transmitted herewith is an **Appeal Brief under 37 C.F.R. 41.37** in the above-captioned application.

☐ Small Entity Status of this application under 37 C.F.R. 1.9 and 1.27 has been established by a previously filed statement.

☐ A verified statement to establish small entity status under 37 C.F.R. 1.9 and 1.27 is enclosed.

☐ An Information Disclosure Statement, PTO Form 1449, and references cited.

☐ A Request for Extension of Time.

☐ No additional fee is required.

The fee has been calculated as shown below:

Claims After Amendment	No. Claims Previously Paid For	Present Extra	Small Entity		Other Than A Small Entity	
			Rate	Fee	Rate	Fee
Total Claims: 28	*31	0	x25=	\$	x 50=	\$0.00
Indep. Claims: 4	**6	0	x100=	\$	x200=	\$0.00
Appeal Fee			+250=	\$	+500=	\$500.00
Extension Fees for ___ Month(s)				\$		\$0.00
Total:				\$	Total:	\$500.00

* If less than 20, write 20

** If less than 3, write 3

☐ Please charge my Deposit Account No. 19-0089 in the amount of \$_____.

☒ A check in the amount of \$500.00 to cover the filing fee is included.

☒ The U.S. Patent and Trademark Office is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 19-0089.

☒ Any additional filing fees required under 37 C.F.R. 1.16.

☒ Any patent application processing fees under 37 C.F.R. 1.17, including any required extension of time fees in any concurrent or future reply requiring a petition for extension of time for its timely submission (37 C.F.R. 1.136(a)(3)).

William E. Lyddane
 Bruce H. Bernstein William E. Lyddane
 Reg. No. 29,027 Reg. No. 41,568

P23935.A10



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Kazutoyo MAEHIRO

Group Art Unit: 2161

Appln. No. : 09/820,554

Examiner: Susan Y. Chen

Filed : March 29, 2001

Confirmation No.: 4973

For : MEMBERSHIP INFORMATION RETRIEVAL SERVER, USER
TERMINAL, MESSAGE - SENDING TERMINAL, AND
METHOD FOR RETRIEVING MEMBERSHIP INFORMATION
AND FOR SENDING MESSAGE

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Appeal Brief-Patents
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir :

This appeal is from the Examiner's rejection of claims 1 – 13, 15 – 28, and 30, as set forth in the Official Action of January 20, 2006.

A Notice of Appeal was filed on April 20, 2006, in response to the Official Action dated January 20, 2006.

The requisite fee for filing a Notice of Appeal under 37 C.F.R. 41.20 (b)(1) was paid on April 20, 2006. The requisite fee for filing a brief in support of appeal under 37 C.F.R. 41.20 (b)(2) is being paid concurrently. However, if for any reason the necessary fees are not associated with this file or the attached fee is inadequate, the Commissioner is authorized to charge any necessary fees to Deposit Account No. 19-0089.

(1) REAL PARTY IN INTEREST

The real party in interest is Kabushiki Kaisha Square Enix (also trading as Square Enix Co., LTD), as established by a Merger recorded in the U.S. Patent and Trademark Office on August 7, 2003, at Reel 014360 and Frame 0827.

(2) RELATED APPEALS AND INTERFERENCES

No related appeals and/or interferences are pending.

(3) STATUS OF THE CLAIMS

Claims 1 – 13, 15 – 28, and 30 stand rejected. Claims 14, 29, and 31 have been canceled. A copy of claims 1 – 13, 15 – 28, and 30, the rejections of which are appealed, is attached as an Appendix to this brief.

(4) STATUS OF THE AMENDMENTS

No amendments have been submitted subsequent to the Official Action mailed January 20, 2006.

(5) SUMMARY OF THE CLAIMED SUBJECT MATTER

Initially, appellants note that the following descriptions are made with respect to the independent claims and include references to particular parts of the specification. As such,

P23935.A10

the following are merely exemplary and are not a surrender of other aspects of the present invention that are also enabled by the present specification and that are directed to equivalent structures or methods.

The present invention relates to messaging. More specifically, the present invention relates to retrieving membership information of other users. From a user terminal, the user sends a request to retrieve membership information to a profile server. The profile server retrieves profiles of members, based upon the request, and sends the retrieval results to the user terminal for display. (Page 17, lines 9 – 17)

In order to retrieve membership information, the user provides the profile server with a retrieval condition (any word or phrase) corresponding to any other member to which the user desires to send a message. For example, if the user wants to retrieve any member having membership information with a character string of "RPG", such a character string may be provided as the retrieval condition to be sent to the profile server. (Page 18, lines 11 – 24)

The profiles that are searched can be updated by members whenever necessary. For example, the profile can be updated to indicate that the member is playing a game, or seeking another playmate. (Page 19, lines 9 – 13) As seen in Fig. 4, video game status information, such as "playing the puzzle game now" can be input.

In one embodiment, the user selects one or more members from the retrieved results. Information of each selected member is listed in a temporary list. The user can then send a message to all of the users in the temporary list. (Page 17, lines 17 – 24)

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether Claims 1 – 13, 15 – 28 and 30 are properly rejected under 35 U.S.C. 103(a) as obvious over MACNAUGHTON et al. (U.S. Patent No. 6,433,795, also referred to simply as MACNAUGHTON) in view of JUNKIN (U.S. Patent No. 6,193,610).

(7) ARGUMENT

Claims 1 – 13, 15 – 28 and 30 Are Not Obvious over MACNAUGHTON in View of JUNKIN under 35 U.S.C. §103(a)

The References Relied upon by the Examiner Are Non-analogous

The references relied upon by the examiner are non-analogous. Two criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. *In re Deminski*, 796 F.2d 436, 442, 230 USPQ 313, 315 (Fed. Cir. 1986); *In re Wood*, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979).

The present invention relates to messaging (such as email). More specifically, the present invention relates to searching membership profiles, including video game status information. In one embodiment, the search results are used to determine message recipients. JUNKIN, on the other hand, relates to interactive TV, including enabling participants to engage in TV programming, such as sports, games and other events. The

P23935.A10

examiner relies upon the abstract, Figs. 4A – 4B, and portions of col. 8 – 10. The passages of JUNKIN upon which the examiner relies (as well as the rest of JUNKIN) are entirely unrelated to searching membership information of other users and sending messages to other users.

Consequently, it is submitted that at least JUNKIN is non-analogous to the present invention because it is from a different field of endeavor and because it is not pertinent to the problems addressed by the inventors of the claimed invention.

There Is No Motivation to Combine MACNAUGHTON et al. with JUNKIN

Even if the references are considered analogous (which they are not), there is no suggestion, motivation, incentive, or reason to combine them in the manner proposed by the examiner, except that provided in appellant's specification. "[T]he record must provide a teaching, suggestion, or reason to substitute computer-controlled valves for the system of hoses in the prior art. The absence of such a suggestion to combine is dispositive in an obviousness determination." See *SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d 878, 886-87, 8 USPQ2d 1468, 1475 (Fed. Cir. 1988).

The examiner's motivation for combining the references is to "provide a user friendly real time video game status and allows the player to make selections as desired." However, MACNAUGHTON et al. is not concerned with user friendly video game status. Nor does JUNKIN provide any teaching or suggestion for combination with a system such as MACNAUGHTON et al.

Although not clearly stated, it is assumed the "selection" to which the examiner is referring is the selecting recited in claims 13, 15, 28 and 30. At least because JUNKIN is unconcerned with messaging between users, JUNKIN is not related to selecting members, included in the displayed membership information, to be message recipients. One who is reading JUNKIN would not look to MACNAUGHTON for the teachings of the present invention. Similarly, one who is learning about the online service community of MACNAUGHTON would have no reason to look to the interactive TV teachings of JUNKIN. The only motivation for the proposed combination is provided by appellant's specification.

The Combination of MACNAUGHTON et al. with JUNKIN Does Not Teach or Suggest

All of the Limitations of Claims 1, 15, 16 or 30

Even if combined, the references fail to teach all the recited claim limitations. For example, claim 1 requires a membership information retrieval server for retrieving membership information by accepting at least one retrieval condition from a group of user terminals. The server includes a storage device for receiving the membership information from a group of users and storing the membership information comprising user-entered text messages that are dynamically updated by the users as well as dynamically updated video game status information. The server also includes a retrieval system and a communications system. The retrieval system compares the at least one retrieval condition with the user-entered information and extracts selected membership information from the storage device. The communications system sends

P23935.A10

the membership information extracted by the retrieval system to the user terminals from which the at least one retrieval condition are sent.

Claim 15 recites a method for sending a message. The method includes receiving membership information about members sent from a group of user terminals by a server and storing the membership information in a storage device in the server. The membership information includes user-entered text messages that are dynamically updated by the users and dynamically updated video game status information. The method also includes sending at least one retrieval condition to the server from one of the group of user terminals; and comparing the at least one retrieval condition with the dynamically updated user-entered information and determining selected membership information that matches the at least one retrieval condition. The method further includes extracting the selected membership information from the storage device and sending the extracted membership information to the user terminal that sent the at least one retrieval condition; as well as displaying the membership information sent from the server on a display of the user terminal, accepting the selection of a plurality of members included in the displayed membership information to create a temporary user list that includes the membership information about a plurality of accepted members. The method further includes sending a message entered in the user terminal to the plurality of members in the created temporary user list.

Claims 16 and 30 include similar recitations.

Each of claims 1, 15, 16 and 30 requires “user-entered text messages that are dynamically updated by the users.” In the rejection, the examiner relies upon col. 8,

P23935.A10

lines 33 – 42 to teach such a claim limitation. The passage, however, describes collecting information during the membership process and canceling the membership to delete the profile data. It is submitted that entering information during a membership process is exactly the opposite of dynamically updating information. It is believed that the disclosed membership process is a one time event, that precludes the possibility of later updates. There is no discussion of such updating. Moreover, creating a different profile for every community is believed to be distinguishable from updating.

Not only is MACNAUGHTON's profile creation different from the embodiment recited in applicant's claims, but more importantly, MACNAUGHTON is limited to a basic Who's Online search that only searches for members who are online and returns a list of members currently online. No searching of profiles (including user entered data) is taught or suggested by MACNAUGHTON. That is, MACNAUGHTON does not describe the more sophisticated search capability of the claimed embodiment. The passages relied upon in the outstanding Official Action to show searching dynamically entered information do not describe user-entered messages that can be searched. In this regard, the membership profile of MACNAUGHTON et al. is not searched, regardless of whether the user has a different profile for each community, whether they can cancel membership, or whether they can automatically become members. Although, MACNAUGHTON teaches searching information content from the service (col. 1, line 64), searching community comments (col. 8, line 22), and searching community membership (in other words who is in a community)(col. 9, line 45), such searches are believed to be sufficiently distinct from the claimed searching.

Further, col. 8, lines 23 -27 of MACNAUGHTON disclose that a “member of a community may also interact and communicate with other community members who have similar interests or shared circumstances by initiating synchronous communications such as chat or conferencing.” Thus, MACNAUGHTON teaches that the mere fact that two members are in the same community is sufficient to determine that they have shared circumstances or similar interests. Accordingly, MACNAUGHTON does not recognize the need for an additional search capability to refine and focus the degree of similarity. Rather MACNAUGHTON teaches that the problem of finding relevant users is solved because members are already in the same community, and therefore MACNAUGHTON does not provide the advanced search capability of the claimed invention.

In addition, MACNAUGHTON discloses, at col. 15, (line numbers unclear), that the “membership search” returns a list of all users currently logged into the community.

Col. 9, lines 42/43 is consistent, and indicates that community membership can be searched. In contrast, at least claims 1, 15, 16 and 30 require searching dynamically updated user entered membership information. Whether or not a user is within a community is not dynamically updated user entered text messages.

Further, the above-noted features, which are not disclosed or suggested by MACNAUGHTON, are also not disclosed or suggested by JUNKIN; nor does the outstanding Official Action assert that the above-noted features are disclosed or suggested by JUNKIN.

Therefore, for at least these reasons it is submitted that claims 1, 15, 16 and 30 are patentable over the applied prior art.

The Combination of MACNAUGHTON et al. with JUNKIN Does Not Teach or Suggest All of the Limitations of Claims 13, 15, 28, or 30

Claims 13, 15, 28 and 30 each recite a feature for "accepting selection of a plurality of members", and creating a "temporary user list that includes membership information about a plurality of selected members" or substantially similar language.

MACNAUGHTON does not disclose or suggest any similar feature, and the portions of MACNAUGHTON applied in the Official Action as disclosing these features have absolutely nothing to do with creating a temporary list of users based upon the search results. For example, the examiner relies upon Figs. 4 and 5 and the associated text. Fig. 4 relates to a tracking server that logs activities of users served by community servers. Fig. 5 relates to a threaded message server used to create and retrieve member threaded message annotations created on specific web pages. These cited portions do not retrieve membership information, display the retrieved membership information, accept selection of a plurality of members included in the displayed membership information to create a temporary list that includes the membership information about the selected members, or send a message to the members in the created temporary list, for example as recited in claim 30.

The cited portions are entirely unrelated to transmitting messages to users in a temporary list or even creating the temporary list. The rejections of claims 13, 15, 28

P23935.A10

and 30 are so lacking in substance, that it is difficult to even find similarities between the applied references and the claims to discuss in this brief. Finally, it is also noted that the examiner did not even address each and every claim limitation in claims 13, 15, 28, and 30 in the Official Actions.

The above-noted features, which are not disclosed or suggested by MACNAUGHTON, are also not disclosed or suggested by JUNKIN; nor do the Official Actions assert that the above-noted features are disclosed or suggested by JUNKIN.

Therefore, for at least these reasons it is submitted that claims 13, 15, 28, and 30 are patentable.

The Combination of MACNAUGHTON et al. with JUNKIN Does Not Teach or Suggest All of the Limitations of Claims 5, 8, 11, 12, 20, 23, or 26

Claims 5, 8, 11, 12, 20, 23, and 26 each recite that "membership information stored in the storage device is updated based on user input when one of the users desires to update as the result of changed circumstances".

The Official Actions do not address these claim limitations. Nevertheless, appellants would like to point out that MACNAUGHTON does not discuss or suggest a user's desire to update. Not only does MACNAUGHTON lack the claimed updating, but MACNAUGHTON also lacks any discussion of the user *desiring* to update his profile. A user desiring to join a new community is not the same (or an obvious variation) as a user desiring to update his membership information. In fact, it is quite possible that the user views it as a burden to complete another membership process for each new community joined, rather than as an

P23935.A10

opportunity to "update" his profile. Moreover, because MACNAUGHTON does not disclose or suggest any manner of updating the membership information, MACNAUGHTON is unconcerned with whether a user wants to update the membership information.

The above-noted features, which are not disclosed or suggested by MACNAUGHTON, are also not disclosed or suggested by JUNKIN; nor do the outstanding Official Actions assert that the above-noted features are disclosed or suggested by JUNKIN.

Therefore, for at least these additional reasons it is submitted that claims 5, 8, 11, 12, 20, 23, and 26 are patentable over the applied art.

(8) CONCLUSION

Claims 1 – 13, 15 – 28, and 30 are allowable and are not properly rejected under 35 U.S.C. 103(a) as being obvious over MACNAUGHTON et al. in view of JUNKIN.

The applied references are non-analogous art.

Even if the art is analogous, it is submitted that there is no motivation to combine the applied references.

Even if combined, the references fail to teach all of the claimed limitations, namely:

With respect to independent claims 1, 15, 16 and 30, the applied references do not teach or suggest at least comparing at least one retrieval condition with the dynamically updated user-entered text messages.

With respect to claims 13, 15, 28, and 30, the applied references do not teach or suggest at least accepting selection of members from the displayed members, creating a

P23935.A10

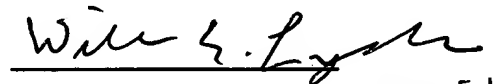
temporary user list including the selected members, and sending a message to the members in the temporary list.

With respect to dependent claims 5, 8, 11, 12, 20, 23, and 26, the applied references do not teach or suggest at least that membership information stored in the storage device is updated based on user input when one of the users desires to update as the result of changed circumstances

Thus, appellants respectfully submit that each and every pending claim of the present application meets the requirement for patentability under 35 U.S.C. 102, 103, and 112, and that the present application and each pending claim are allowable over the prior art of record.

Accordingly, Appellants respectfully request that the Examiner's decision rejecting claims 1-13, 15-28 and 30 be reversed on all grounds.

Respectfully submitted,
Kazutoyo MAEHIRO



Bruce H. Bernstein
Reg. No. 29,027

William E. Lyddane
Reg. No. 41,568

June 20, 2006
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191



CLAIMS APPENDIX

1. A membership information retrieval server for retrieving membership information by accepting at least one retrieval condition from a group of user terminals, comprising:

a storage device for receiving the membership information from a group of users and storing the membership information, the membership information-comprising user-entered text messages that are dynamically updated by the users and the membership information further comprising dynamically updated video game status information;

a retrieval system that compares the at least one retrieval condition with the user-entered information and extracts selected membership information from the storage device; and

a communications system that sends the membership information extracted by the retrieval system to the user terminals from which the at least one retrieval condition are sent.

2. The membership information retrieval server as claimed in claim 1, further comprising:

a determination system that determines whether each of the group of the user terminals is currently online, wherein

the communications server imports the determination results into the membership information and then sends the membership information to the user terminal.

3. The membership information retrieval server as claimed in claim 2, wherein the membership information includes a user name of the member.

4. The membership information retrieval server as claimed in claim 2, wherein the information sent to the retrieval server includes text information.

5. The membership information retrieval server as claimed in claim 2, wherein membership information stored in the storage device is updated based on user input when one of the users desires to update as a result of changed circumstances.

6. The membership information retrieval server as claimed in claim 1, wherein the membership information includes a user name of the member.

7. The membership information retrieval server as claimed in claim 6, wherein the information sent to the retrieval server includes text information.

8. The membership information retrieval server as claimed in claim 6, wherein membership information stored in the storage device is updated based on user input when one of the users desires to update as a result of changed circumstances.

9. The membership information retrieval server as claimed in claim 1, wherein the information sent to the retrieval server includes text information.

10. The membership information retrieval server as claimed in claim 1, wherein the at least one retrieval condition include a character string and the retrieval system extracts membership information on the basis of the character string and the text information included in the membership information.

P23935.A10

11. The membership information retrieval server as claimed in claim 9, wherein the membership information in the storage device is updated based on user input when one of the users desires to update as a result of changed circumstances.

12. The membership information retrieval server as claimed in claim 1, wherein the membership information in the storage device is updated based on user input when one of the users desires to update as a result of changed circumstances.

13. A user terminal for accessing the membership information retrieval server as claimed in claim 1, comprising:

a first sending system that enters at least one retrieval condition and sends the at least one retrieval condition to the retrieval server,

a display that displays the membership information sent from the retrieval server;

a creation system that accepts selection of a plurality of members from the members in the membership information displayed by the display and creates a temporary user list that includes membership information about the plurality of selected members;

a first acceptance system that accepts entry of a message to be sent to a user terminals to be used by the plurality of members listed in the temporary user list; and

a second sending system that sends the message accepted by the first acceptance system to the user terminals.

15. A method for sending a message, comprising:

receiving membership information about members sent from a group of user terminals by a server and storing the membership information in a storage device in the

P23935.A10

server, the membership information comprising user-entered text messages that are dynamically updated by the users and the membership information further comprising dynamically updated video game status information;

sending at least one retrieval condition to the server from one of the group of user terminals;

comparing the at least one retrieval condition with the dynamically updated user-entered information and determining selected membership information that matches the at least one retrieval condition;

extracting the selected membership information from the storage device and sending the extracted membership information to the user terminal that sent the at least one retrieval condition;

displaying the membership information sent from the server on a display of the user terminal, accepting the selection of a plurality of members included in the displayed membership information to create a temporary user list that includes the membership information about a plurality of accepted members; and

sending a message entered in the user terminal to the plurality of members in the created temporary user list.

16. A method for retrieving membership information by accepting at least one retrieval condition from a group of user terminals, comprising:

receiving membership information about members sent from a group of user terminals and storing the membership information in a storage device in the server, the membership information comprising user-entered text messages that are dynamically

P23935.A10

updated by the users and the membership information further comprising dynamically updated video game status information;

comparing the at least one retrieval condition with the dynamically updated user-entered information and determining selected membership information that matches the at least one retrieval condition;

extracting the selected membership information; and

sending the extracted membership information from the server to the user terminals that sent the at least one retrieval condition.

17. The method for retrieving membership information as claimed in claim 16, further comprising:

determining whether each of the group of user terminals is online, wherein the server sends the membership information and the determination results.

18. The method for retrieving membership information as claimed in claim 17, wherein the membership information includes a user name of the member.

19. The method for retrieving membership information as claimed in claim 17, wherein the sending information includes text information.

20. The method for retrieving membership information as claimed in claim 17, wherein the membership information to be stored in the storage device is updated based on user input when one of the users desires to update as a result of changed circumstances.

P23935.A10

21. The method for retrieving membership information as claimed in claim 17, wherein the membership information of the member includes a user name of the member.

22. The method for retrieving membership information as claimed in claim 21, wherein the sending information includes text.

23. The method for retrieving membership information as claimed in claim 21, wherein the membership information to be stored in the storage device is updated based on user input when one of the users desires to update as a result of changed circumstances.

24. The method for retrieving membership information as claimed in claim 17, wherein the sending information includes text.

25. The method for retrieving membership information as claimed in claim 24, wherein the at least one retrieval condition include a character string and the server extracts membership information on the basis of the character string and the text information included in the membership information.

26. The method for retrieving membership information as claimed in claim 24, wherein the membership information to be stored in the storage device is updated based on user input when one of the users desires to update as a result of changed circumstances.

27. The method for retrieving membership information as claimed in claim 16, wherein the membership information of the member includes a user name of the member.

P23935.A10

28. The method for retrieving membership information as claimed in claim 17, further comprising:

 sending the at least one retrieval condition entered by the input system to the retrieval server,

 displaying the membership information sent from the retrieval server on a display;

 accepting selection of a plurality of members from the members in the displayed membership information on the display and creating a temporary user list that includes membership information about the plurality of selected members;

 accepting entry of a message to be sent to user terminals of the plurality of members listed in the temporary user list; and

 sending the accepted message.

30. A recording medium, storing a readable program, wherein the program executes:

P23935.A10

receiving membership information about members sent from a group of user terminals to store in a storage device of a server, the membership information comprising user-entered text messages that are dynamically updated by the users and the membership information further comprising dynamically updated video game status information;

sending at least one retrieval condition to the server from one of the group of user terminals;

comparing the at least one retrieval condition with the dynamically updated user-entered information to determine selected membership information that matches the at least one retrieval condition;

extracting the selected membership information from the storage device and sending the extracted membership information to the user terminal that sent the at least one retrieval condition;

displaying the membership information sent from the server on displays of the user terminals, accepting selection of a plurality of members included in the displayed membership information to create a temporary user list that includes the membership information about the selected members; and

sending a message entered in the user terminal to the members in the created temporary user list.

P23935.A10

EVIDENCE APPENDIX

None